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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,435	06/23/2003	Shawn Patrick Burke	13768.407	9588

7590 08/10/2006

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EXAMINER	
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ART UNIT	PAPER NUMBER
2192	

DATE MAILED: 08/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/602,435	BURKE ET AL.	
	Examiner	Art Unit	
	Isaac T. Tecklu	2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 June 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-41* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-41* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *06/23/2003; 11/03/03*
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to the application filed on 06/23/2003.

2. Claims 1- 41 have been examined.

Oath/Declaration

3. The office acknowledges receipt of a properly signed oath/declaration filed on 06/23/2003.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claims 1-41 are rejected under 35 U.S.C. 102(a) as being anticipated by Korenshtein (US 6,523,134 B2).

As per claim 1, Korenshtein discloses in a computer system that supports a visual user interface designer and a serialization engine capable of saving state for user interface objects created within the visual user interface designer (e.g. FIG. 4, element 408), a method of automatically generating and tracking undo information for changes made to a user interface object within the visual user interface designer so that a developer of the user interface object need not be responsible for generating and tracking the undo information (e.g. FIG. 1, element 116 and FIG. 5, element 500 related text), the method comprising acts of:

receiving one or more change notifications generated in response to one or more changes to the user interface object within the visual user interface designer (in column 8, lines 7-14 "... action from the change and accounting log ...");

calling the serialization engine to serialize at least a portion of the user interface object into a serialized format that is suitable for representing the one or more changes (e.g. FIG. 4, element 408 and related text);

creating an undo unit from the serialized format of the one or more changes to the user interface object (in column 9, lines 41-46 "... undo only that selected ..." e.g. FIG. 5, element 508 and 516 and related text); and

adding the undo unit to an undo stack (in column 8, lines 40-46 "... adding Attr1, FIG. 2, element 208 back to obj1, FIG. 2, element 204).

As per claim 2, Korenshtein discloses a method as recited in claim 1, wherein the user interface object comprises a third-party user interface object for use within the visual user interface designer (e.g. FIG. 1, element 112 and related text).

As per claim 3, Korenshtein discloses a method as recited in claim 1, wherein the one or more change notifications comprise at least one of an adding notification and an added notification (in column 9, lines 36-40 "... requesting the selection of one or more entries of the change ...").

As per claim 4, Korenshtein discloses a method as recited in claim 1, wherein the undo unit identifies one or more routines for undoing the one or more changes made to the user interface object (in column 8, lines 38-45 "... determine what undo functions ...").

As per claim 5, Korenshtein discloses a method as recited in claim 4, further comprising acts of:

receiving a notification to undo the one or more changes in the undo unit (in column 8, lines 7-14 "... action from the change and accounting log ...");

removing the undo unit from the undo stack (in column 8, lines 30-38 "... removing Attr1..."); and

calling the one or more routines for undoing the one or more changes made to the user interface object (in column 8, lines 38-45 "... determine what undo functions ...").

As per claim 6, Korenshtein discloses a method as recited in claim 5, further comprising an act of adding the undo unit to a redo stack as a redo unit (in column 8, lines 40-46 "... adding Attr1, FIG. 2, element 208 back to obj1, FIG. 2, element 204).

As per claim 7, Korenshtein discloses a method as recited in claim 6, wherein the undo unit identifies one or more routines for redoing the one or more changes made to the user interface object, the method further comprising acts of:

receiving a notification to redo the one or more changes in the redo unit (in column 8, lines 7-14 "... action from the change and accounting log ...");

removing the redo unit from the redo stack (in column 8, lines 30-38 "... removing Attr1..."); and

calling the one or more routines for redoing the one or more changes made to the user interface object (in column 8, lines 38-45 "... determine what undo functions ...").

As per claim 8, Korenshtein discloses a method as recited in claim 1, wherein the undo unit comprises a name of the user interface object, a type of the user interface object, and one or more previous states of the user interface object prior to the one or more changes (e.g. FIG. 4, element 402, 404 and 406 and related text).

As per claim 9, this is another version of method claimed computer method discussed above (Claim 1), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Korenshtein.

As per claim 10, Korenshtein discloses a computer program product as recited in claim 9, wherein at least one of the one or more change notifications initiates a transaction for multiple changes to be made to the user interface object (in column 8, lines 7-14 "... action from the change and accounting log ...").

As per claim 11, this is another version of method claimed computer method discussed above (Claim 2), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Korenshtein.

As per claim 12, Korenshtein discloses a computer program product as recited in claim 9, wherein the user interface object comprises a dialog with an OK button to accept any changes made within the dialog (in column 1, lines 30-35 "... OK...") and a CANCEL button to reject any changes made within the dialog (in column 8, lines 50-55 "... cancel the request ...").

As per claim 13, Korenshtein discloses a computer program product as recited in 12, wherein at least one of the one or more change notifications initiates a transaction for changes to be made to the dialog (in column 8, lines 7-14 "... action from the change and accounting log ...").

As per claim 14, Korenshtein discloses a computer program product as recited in claim 13, the method further comprising acts of: receiving a notification that the CANCEL button was selected; and canceling the transaction (in column 8, lines 50-55 "... cancel the request ...").

As per claim 15, Korenshtein discloses a computer program product as recited in claim 13, the method further comprising acts of:

receiving a notification that the OK button was selected (in column 1, lines 30-35 "... OK..."); and

adding the undo unit to an undue stack, wherein the undo unit comprises the transaction (in column 8, lines 40-46 "... adding Attr1, FIG. 2, element 208 back to obj1, FIG. 2, element 204).

As per claim 16, this is program product version of method claimed computer method discussed above (Claim 8), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Korenshtein.

As per claim 17, Korenshtein discloses a computer program product as recited in claim 9, wherein the user interface object does not implement undo for one or more properties of the user interface object (in column 1, lines 60-65 "... cannot perform the undo function...").

As per claim 18, Korenshtein discloses in a computer system that supports a visual user interface designer and a serialization engine capable of saving state for user interface objects created within the visual user interface designer, a method of automatically generating and tracking undo information for changes made to a user interface object within the visual user interface designer so that a developer of the user interface object need not be responsible for generating and tracking the undo information, the method comprising steps for:

an undo engine processing one or more change notifications for one or more changes to the user interface object within the visual user interface designer (in column 8, lines 7-14 "... action from the change and accounting log ...");

the undo engine persisting initial data that represents an initial state of the user interface object prior to the one or more changes (in column 8, lines 7-14 "... action from the change and accounting log ...");

the undo engine persisting subsequent data that represents a subsequent state of the user interface object after the one or more changes (in column 9, lines 36-40 "... requesting the selection of one or more entries of the change ..."); and

the undo engine preparing an undo unit from the initial data and subsequent data for undoing the one or more changes to the user interface object (e.g. FIG. 1, element 116 and related text).

As per claim 19, this is program product version of method claimed computer method discussed above (Claim 3), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Korenshtein.

As per claim 20, this is program product version of method claimed computer method discussed above (Claim 4), wherein all claim limitations have been addressed and/or covered in

cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Korenshtein.

As per claim 21, Korenshtein discloses a method as recited in claim 20, further comprising steps for:

storing the undo unit (e.g. FIG. 1, element 116 and related text);

listening for a notification to undo the one or more changes in the undo unit (in column 3, lines 30-35 "... classes and objects having the attribute ...");

using the undo unit and the one or more undo routines to undo the one or more changes made to the user interface object (in column 8, lines 7-14 "... action from the change and accounting log ..."); and

deleting the undo unit (in column 5, lines 5-10 "... DELETE function ...").

As per claim 22, Korenshtein discloses a method as recited in claim 21, further comprising a step for storing the undo unit as a redo unit (e.g. FIG. 1, element 116 and related text).

As per claim 23, Korenshtein discloses a method as recited in claim 22, wherein the redo unit comprises one or more routines for redoing the one or more changes made to the user interface object, the method further comprising steps for:

listening for a notification to redo the one or more changes in the redo unit (in column 3, lines 30-35 "... classes and objects having the attribute ...");

using the redo unit and the one or more redo routines to redo the one or more changes made to the user interface object (in column 8, lines 7-14 "... action from the change and accounting log ..."); and

deleting the redo unit (in column 5, lines 5-10 "... DELETE function...").

As per claim 24, Korenshtein discloses a method as recited in claim 23, wherein the user interface object does not implement redo (in column 1, lines 60-65 "... cannot perform the undo function...").

As per claim 25, Korenshtein discloses a method as recited in claim 23, wherein the step for the undo engine persisting initial data and persisting subsequent data comprises an act of calling the serialization engine to serialize at least a portion of the user interface object into a serialized format that is suitable for representing the one or more changes (e.g. FIG. 4, element 408 and related text).

As per claim 26, this is program product version of method claimed computer method discussed above (Claim 18), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Korenshtein.

As per claim 27, Korenshtein discloses a computer program product as recited in claim 26, wherein the undo unit comprises a transaction for a plurality of changes made to the user interface object (in column 8, lines 38-45 "... determine what undo functions ...").

As per claim 28, Korenshtein discloses a computer program product as recited in claim 26, wherein the one or more change notifications comprise a rename notification (e.g. FIG. 4, element 402, 404 and 406 and related text).

As per claim 29, Korenshtein discloses a computer program product as recited in claim 26, wherein the user interface object comprises a dialog with an OK button to accept any changes made within the dialog (in column 1, lines 30-35 "... OK...") and a CANCEL button to reject any changes made within the dialog (in column 8, lines 50-55 "... cancel the request ...").

As per claim 30, Korenshtein discloses a computer program product as recited in claim 29, wherein at least one of the one or more change notifications initiates a transaction for changes to be made to the dialog (in column 8, lines 7-14 "... action from the change and accounting log ...").

As per claim 31, Korenshtein discloses a computer program product as recited in claim 30, the method further comprising acts of: receiving a notification that the CANCEL button was selected; and canceling the transaction (in column 8, lines 50-55 "... cancel the request ...").

As per claim 32, Korenshtein discloses a computer program product as recited in claim 30, the method further comprising acts of:

receiving a notification that the OK button was selected (in column 1, lines 30-35 "... OK..."); and

adding the undo unit to an undue stack, wherein the undo unit comprises the transaction (in column 8, lines 40-46 "... adding Attr1, FIG. 2, element 208 back to obj1, FIG. 2, element 204).

As per claim 33, Korenshtein discloses a computer program product as recited in claim 26, wherein the user interface object is a third-party user interface object for use within the visual user interface designer (e.g. FIG. 1, element 112 and related text).

As per claim 34, Korenshtein discloses a computer program product as recited in claim 26, wherein the undo unit comprises a name of the user interface object, a type of the user interface object, one or more previous states of the user interface object prior to the one or more changes, and one or more subsequent states of the user interface object after the one or more changes (e.g. FIG. 4, element 402, 404 and 406 and related text).

As per claim 35, this is program product version of method claimed computer method discussed above (Claim 18), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Korenshtein.

As per claim 36, Korenshtein discloses a computer program product as recited in claim 35, further comprising one or more routines for undoing the one or more changes made to the user interface object (in column 8, lines 38-45 "... determine what undo functions ...").

As per claim 37, Korenshtein discloses a computer program product as recited in claim 35, further comprising one or more routines for redoing the one or more changes made to the user interface object (in column 8, lines 38-45 "... determine what undo functions ...").

As per claim 38, Korenshtein discloses a computer program product as recited in claim 35, further comprising one or more routines for storing the undo unit (e.g. FIG. 1, element 116 and related text).

As per claim 39, Korenshtein discloses a computer program product as recited in claim 35, further comprising one or more routines that generate the state data for the user interface object (e.g. FIG. 4, element 402, 404 and 406 and related text).

As per claim 40, Korenshtein discloses a computer program product as recited in claim 35, wherein the one or more routines that request state data for the user interface object are capable of interacting with a plurality of distinct state data implementations (in column 9, lines 36-40 "... requesting the selection of one or more entries of the change ...").

As per claim 41, Korenshtein discloses a computer program product as recited in claim 35, wherein the one or more routines that request storage of the undo unit are capable of interacting with a plurality of distinct storage implementations (in column 8, lines 38-45 "... what undo functions ...").

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isaac T. Tecklu whose telephone number is (571) 272-7957. The examiner can normally be reached on M-TH 9:300A - 8:00P.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Isaac Tecklu
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TUAN DAM
SUPERVISORY PATENT EXAMINER